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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,327	10/26/2001	Yves Stricot	680-010627-US(PAR) / C271	2710
2512	7590	03/05/2004	EXAMINER PAK, SUNG H	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			ART UNIT 2874	PAPER NUMBER

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/046,327

Applicant(s)

STRICOT ET AL.

Examiner

Sung H. Pak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2003.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-15 and 17-34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 11-15 and 17-34 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 26 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

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DETAILED ACTION

Applicants' amendment filed 11/13/2003 has been entered. Claims 11-15, 17-34 are now pending. All pending claims have been carefully reconsidered in view of the amendment, however they are still unpatentable. Claims 11-15, 17-33 are rejected based on the prior ground of rejection. Claim 34 is rejected based on a new ground of rejection because claim 34 is a newly added claim containing newly added limitations. Please refer to Remarks for further discussion.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 11-15, 17-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Giboney et al (US 6,318,909 B1) as discussed in the previous office action.

Giboney et al reference discloses an optoelectronic device with all the limitations set forth in the claims, including: a first printed-circuit element, on which is mounted an optical emitter/ receiver ("32" Fig. 1A); having openings to receive centering pins of complementary optical connector ("43" Fig. 1A); the optoelectronic device being provided further with a heatsink, wherein the first printed-circuit element is applied

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against a first face of the heatsink ("30" Fig. 1A and claim 2); wherein a printed-circuit segment connects a first element ("26") to a second printed circuit element ("27"), the second printed circuit element being applied against a second face of the heatsink (Fig. 1A); the first face is a secant relative to the second face, and the flexible printed-circuit segment forms a 90 degree elbow (Fig. 1A); the mechanical support/ heatsink having two receptacles for receiving centering pins (Figs. 1D-1E); wherein the optic receiver is positioned between the holes (Fig. 1A); the second printed-circuit element has microbeads for connection with another device such as a motherboard (Fig. 3A).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Giboney et al (US 6,318,909 B1).

Giboney et al reference discloses an optical device with all the limitations set forth in the claims as discussed above, except it does not explicitly disclose the use of first and second circuit elements that are discontinuous segments. Giboney does teach, however, a flexible printed circuit portion connecting first and second printed circuit element portions (column 7 lines 41-50).

However, the use of separate circuit boards in an optical device packaging is well known in the art. Plurality of separate circuit boards may be advantageously used to separately control each optical device within the packaging. Such arrangement is desirable because separate circuit boards allow modular design, which makes replacement and servicing of optical devices easy. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Giboney device to have separate circuit boards.

Remarks

Response to Arguments:

Starting on page 7 of the applicants' response, it is argued that Giboney reference teaches a single flexible circuit element, and that Giboney reference cannot anticipate the claimed subject matter, because the claims recite first and second printed circuit board elements that are rigid.

The examiner respectfully disagrees with the applicants' characterization of Giboney reference, and maintains the ground of rejection that Giboney reference teaches first and second rigid printed circuit elements.

I. Flexible vs. Rigid Printed Circuit board

On page 8, the applicants argue that the printed circuit board of Giboney reference is flexible or flex-rigid. The examiner respectfully points out that although Giboney reference prefers flexible printed circuit board, it also fully anticipates the use of rigid printed circuit boards. The reference states, "Although rigid circuit boards or circuit boards other than printed circuit boards **can be used**, the printed circuit board 25 is preferably a flexible printed circuit board." (emphasis added) (column 7 lines 31-34). Also, the use of rigid printed circuit board does not teach away from the reference because the reference clearly states that rigid printed circuit board **can be used** instead of the flexible printed circuit boards, albeit the resulting device would not have some of the benefits that flexible circuit boards may provide. Although a flexible printed circuit board is a preferred embodiment, the reference fully anticipates the use of rigid printed circuit board.

II. Single Printed Circuit v. First and Second Printed Circuit Board Elements

On pages 7-8, it is argued that Giboney reference discloses a single printed circuit board and therefore cannot anticipate first and second printed circuit board elements.

The examiner respectfully points out that, even though the reference discloses a **continuous** printed circuit board, it is composed of first "26" and second "27" circuit

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board elements that contacts first "30" and second "31" support elements of a **continuous** support structure "29". A component need not necessarily be discontinuous in order for it to constitute multiple elements (The American Heritage Dictionary defines "Element" as "a fundamental, essential or irreducible constituent of a composite entity"). For example, Giboney reference refers to first and second support elements ("30", "31") as distinct "elements" although the support structure is a unitary continuous structure (column 7 lines 6-8). Therefore, Giboney reference fully anticipates first and second printed circuit board elements as applied in the rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday - Thursday : 6:30am-5:00pm.


The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sung H. Pak
Examiner
Art Unit 2874

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